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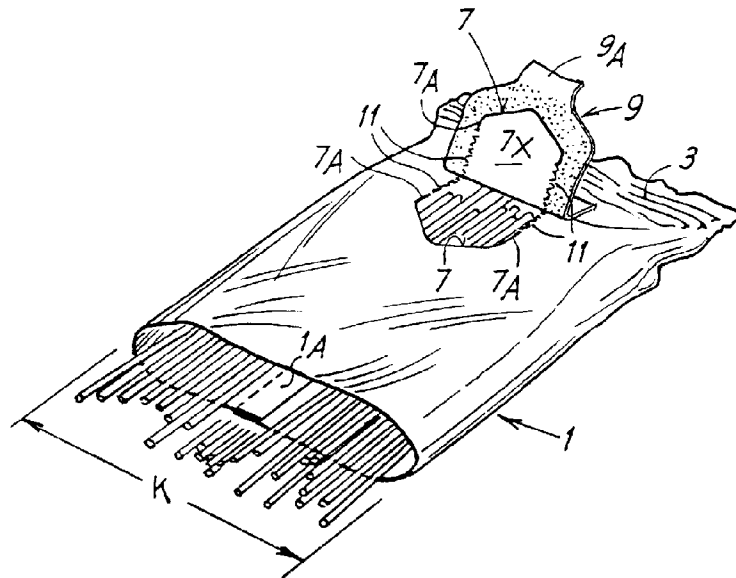
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[Continued on next page]

(54) Title: PACKAGE FOR PASTA



(57) Abstract: The package presents a U-shaped cut (7), near a closed end (3), ending with two terminal sections (7A, 7A) directed towards the closed end; a self-adhesive label (9) is applied on the wrapping (1) to entirely cover said cut (7, 7A, 7A) and presents a tab (9A) for gripping and detaching directed in the opposite way with respect to said two terminal sections (7A, 7A); in this way lifting the self-adhesive label (9) causes the opening at least of the area (7X) of the material of the package which is delimited by said cut and additional possible tearing (11); the package can be closed by means of said label (9).

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*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

## PACKAGE FOR PASTA

DESCRIPTION

5 Packages for various products (including long pasta) have one or both ends closed by folding back several edges which are overlapped and sealed. In these packages, a ribbon is frequently present for offering a gripping appendix which can be used to tear the edge of the film forming the package for obtaining either complete or convenient opening for picking the product.

10 The simplest, most cost-effective and fastest to form packages in the production chain are made from a tubular wrapping with two transversal closed ends, each of which is soldered. This type of package cannot be equipped with a peripheral ribbon for tearing the wrapping near one of said closed ends.

15 The package herein described - generically for pasta, specifically long pasta or similar - ensures easy opening for picking, offers the possibility of stable and efficient closure during packaging and furthermore offers the possibility of closing the package again to preserve the residual contents.

These and other objects and advantages will be additionally explained in the following description.

20 According to the invention, the wrapping presents a U-shaped cut located near one closed end, terminating with two terminal sections directed towards said closed end; an adhesive label is applied on the wrapping for completely covering said cut and presenting a tab for gripping and detaching, directed in the opposite direction of said two ends; with this arrangement,  
25 lifting the adhesive label will open at least the area of material of the package which is delimited by said cut and the opening can be closed again by means of said label.

Said terminal sections directed towards the closed end lead to additional tearing of the wrapping even up to the transversal closed end. The  
30 opening for picking can be thus extended.

The label can be extended towards said transversal closed end and can be arranged next to it or even fastened into it and with it, by means of

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additional soldering, to limit the detachment and consequently permit easy closing of the package after partial picking.

Said two sections of the cut, which are directed towards the transversal closed end, can be respectively distanced by a limited extent with respect to the transversal dimension of the package; in this way, the opening permits the partial spontaneous, and consequently approximately dosed, release of product, at least during the first picking. This is possible especially in the case of long pasta packages.

The usual tubular wrapping of the package presents a longitudinal soldering; said cut and adhesive label are advantageously arranged on the opposite side of said longitudinal soldering.

The drawing shows possible forms of embodiment of the packaging, specifically:

Figure 1 shows a package for long pasta, seen from the front;

Figure 2 is a partial view according to II-II in Figure 1, in partial cross-section;

Figure 3 is a partial view according to III-III in Figure 1, with the package open and the product being released;

Figures 4 and 5 show a perspective view an end of the package with the label in closed position and in lifted in opened position, respectively;

Figures 6 and 7 show a package for short pasta, in initial closed and open position, and

Figure 8 shows another package in closed conditions after the first opening.

In the drawing (Figures 1 to 5), numeral 1 indicates the tubular wrapping of a package, consisting of a film which can be torn, mostly transparent, generally made of polypropylene. The wrapping is formed with a longitudinal soldering 1A for making the tube and two transverse closed ends 3, 3, generally closed by soldering, with possible deformation of the resulting thickness. The tubular wrapping is developed in length between the two closed ends 3, and is suitable for containing long pasta (spaghetti or similar).

In order to facilitate picking the contents, also in partial amounts,

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according to the invention, a cut 7, essentially shaped as a U, with two terminal sections 7A approximately longitudinal and facing the closed end 3, is made near one of the two closed ends 3. Furthermore, a self-adhesive label 9 is applied in the area of said cut 7. The label 9 can be detached by using a gripping tab 9A; the label 9 covers all the area 7X delimited by the cut 7 and also covers the wrapping outside said area 7X. Said self-adhesive label can extend up to the closure end 3 and can also be fastened to said closed end.

The cut 7, 7A can be dimensioned between the two extensions 7A, to a reduced extent with respect to the corresponding transversal dimension K of the front of the package 1, for the purposes described below.

The package 1 is formed and filled according to traditional methods, being the cuts 7 and the application of the self-adhesive labels 9 made on the web which is fed longitudinally, i.e. in parallel to sealing 1A, and in positions, which are defined with respect to printed references corresponding to the closed ends 3, made by soldering or in other suitable way.

The wrapping is sealed, by the presence of the self-adhesive label 9, as traditional wrappings, without the risk of accidental opening along the cut 7, 7A, 7A.

Either to pick the product (or during the first picking), by lifting the self-adhesive label 9 with the help of the tab shaped appendage 9A, the area 7X of the wrapping, delimited by the cut 7, 7A, 7A is dragged by the label 9. This also causes additional tearing 11 of the wrapping, as extempore extensions of the sections 7A, 7A of the cut 7; the tearing, and consequently the opening of the packaging, can reach the transversal closed end 3, where the tearing stops.

This creates an opening developed between the cut 7, 7A, 7A and the transversal closed end 3; a fraction, also approximately dosed, of the long pasta, or other, contained in the package can slip out and be extracted from this opening, according to the ratio of the distance between the sections 7A, 7A of the cut and the dimension K; the package can be entirely emptied by additional slipping and extraction operations.

To close the wrapping 1, once or more times, when the package

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contains a residual amount of product, the label 9 is simply reapplied to the wrapping, with an accurate operation because it is guided by the portion of the material of the wrapping (including area 7X) which remains attached to the label 9 and possibly by the area 7X and by a portion of the label, if any, which remain attached to the closed end 3. In this way, the wrapping is essentially sealed again.

Figures 6 and 7 show a package, specifically for short pasta. The same references numerals as the previous example are used in these figures, increased by "100". The envelope wrapping 101, of a relatively cost-effective type, is defined by transversal closed ends 103. The wrapping presents, near one of the closed ends 103, a cut 107, 107A, 107A, similar to cut 7, 7A, 7A, which is completely covered by a self-adhesive label 109 with a tab 109A for easy lifting.

In the conditions prior to the first opening, the package is presented as shown in Figure 6, with the cut 107, 107A, 107A completely closed by the label 109. By lifting the tab 109A according to f7, the wrapping is opened along the cut 107, 107A by lifting the area 107X even till this generates tearing 111 of the wrapping (equivalent to tearing 11) to the contiguous transversal closed end 103.

To close the package, the self-adhesive label is returned to its original position; this is facilitated by the area 107X which in any case is fastened to the closed end 103. When the self-adhesive label is arranged very close to the closed end 103, the torn section 111 is very limited and closing again is nearly complete.

Figure 8 shows a similar package to that in Figures 6 and 7 and the same reference numerals are used.

The packages shown in Figures 6 and 8 are also suitable specifically for short pasta or products in granules.

The cut 7, 7A, 7A or 107, 107A, 107A can be made by a rotating die cutter located upstream to the tubular forming machine, which closes the material of the package along the longitudinal soldering 1A. After this operation, the adhesive label 9 and 109 is applied to immobilise the material

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in the area of the cut. The same label 9 or 109 will later permit opening and closing the package. The other operations will remain as usual.

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CLAIMS

1) A package for pasta, specifically long pasta or similar, developed as a tubular wrapping (1), with two transversal closed ends (3, 3), characterised in that near at least one of the closed ends (3, 3), the wrapping  
5 (1) presents a U-shaped cut (7) ending with two terminal sections (7A, 7A) directed towards the closed end; and in that a self-adhesive label (9) is applied on the wrapping (1) to entirely cover said cut (7, 7A, 7A) and presents a tab (9A) for gripping and detaching directed in the opposite way with respect to said two terminal sections (7A, 7A); the arrangement being such that the  
10 lifting the adhesive label (9) causes the opening at least of the area (7X) of the material of the package which is delimited by said cut (7, 7A, 7A) and which can be closed by means of said label.

2) Package according to claim 1, characterised in that said terminal sections (7A, 7A), directed towards the closed end (3), lead to additional  
15 tearing (11) of the wrapping, even up to the transversal closed end (3).

3) Package according to claim 2, characterised in that said label (9) is extended towards said transversal closed end (3).

4) Package according at least to claim 1, characterised in that said two sections (7A, 7A), directed towards the transversal closed end (3), are  
20 reciprocally distanced to an extent which is limited with respect to the overall transversal dimension (K) of the package, such that the opening permits the spontaneous, only partial release of the product, which is consequently dosed.

5) Package according to any one of the claims above, in which the  
25 tubular wrapping (1) presents a longitudinal soldering (1A), characterised in that said cut (7, 7A, 7A) is made on the opposite side of said longitudinal soldering.

6) A package for pasta, and the like, with an opening of easy picking, all as described and illustrated.

30



Fig. 1

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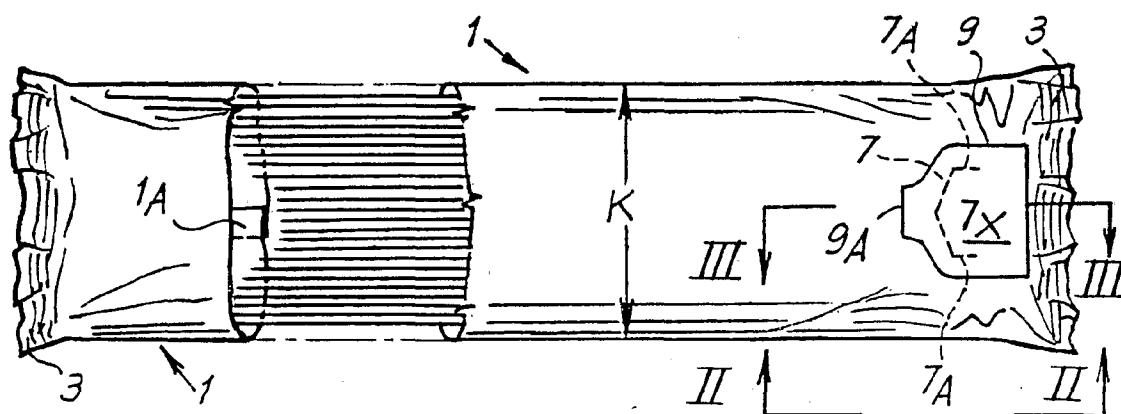


Fig. 2

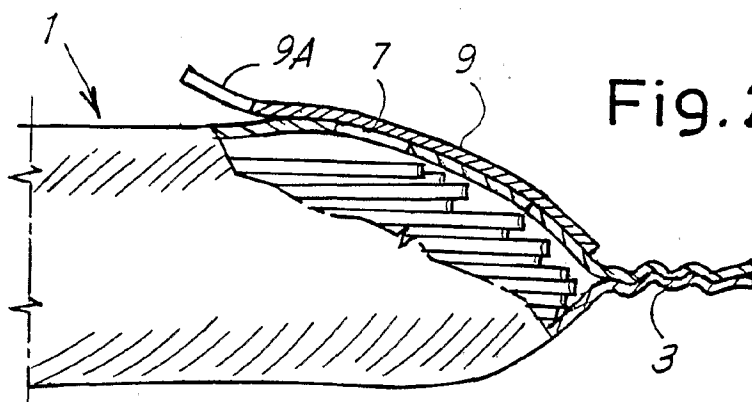
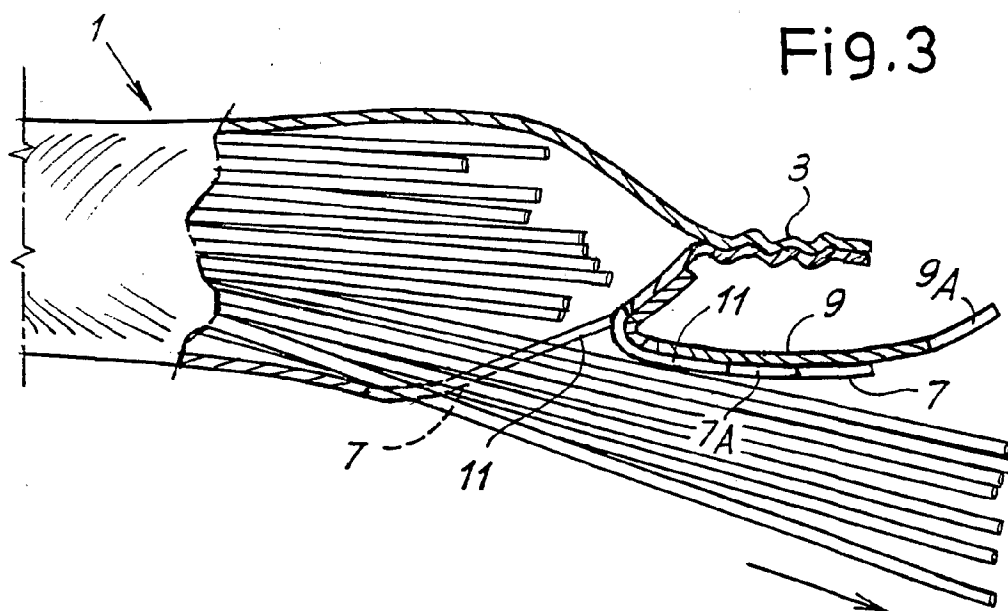


Fig. 3



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Fig. 4

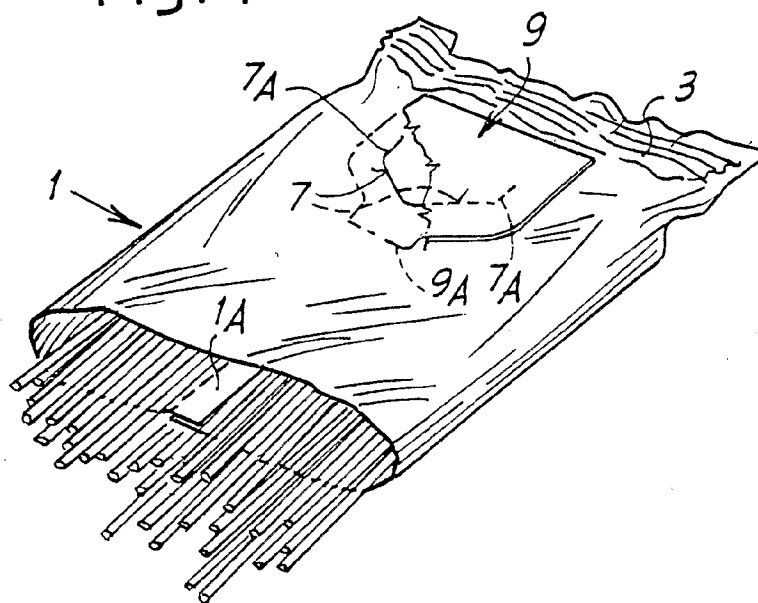
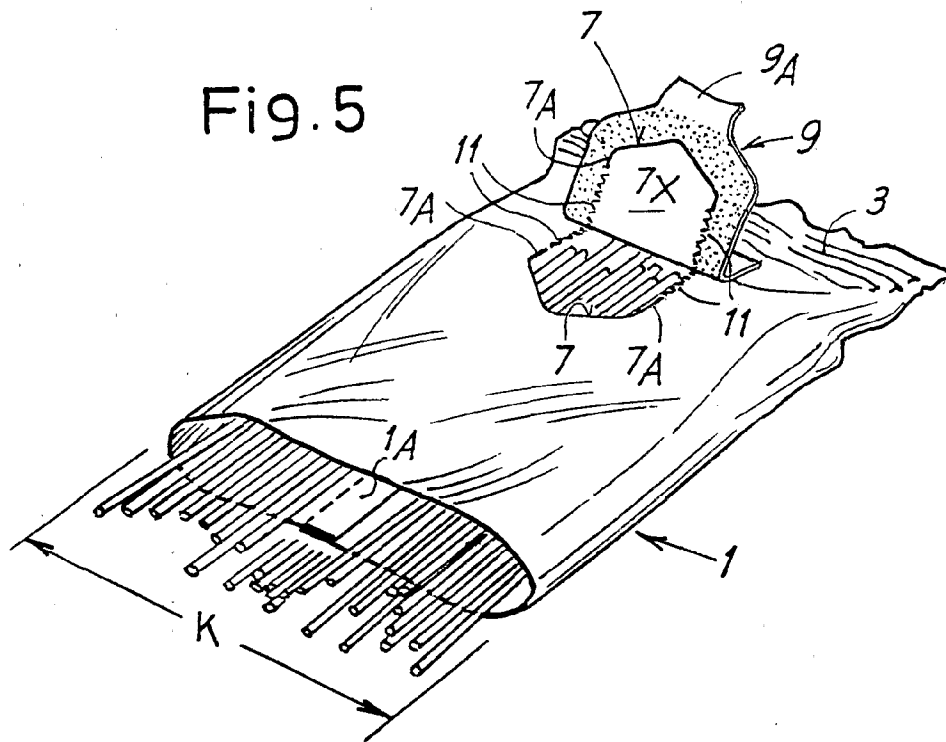


Fig. 5



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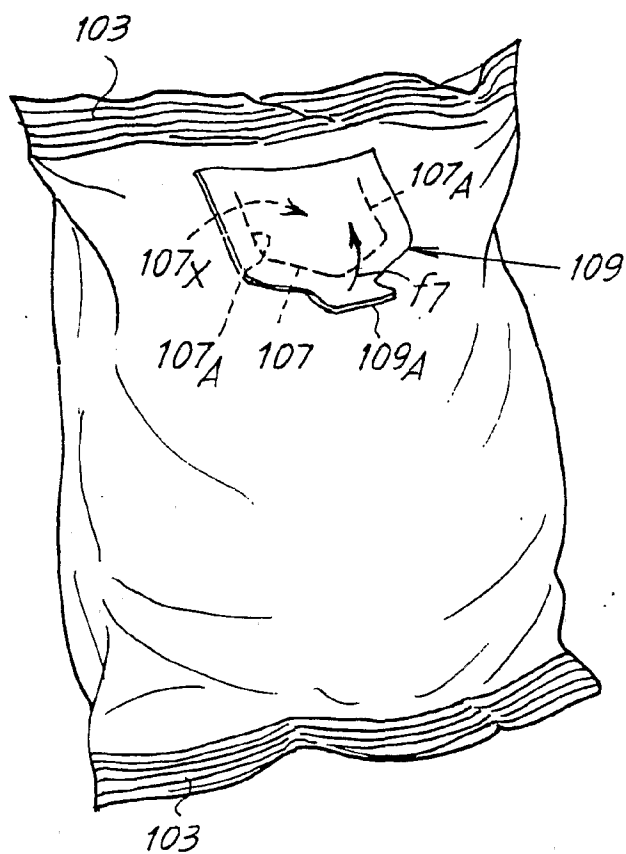


Fig.6

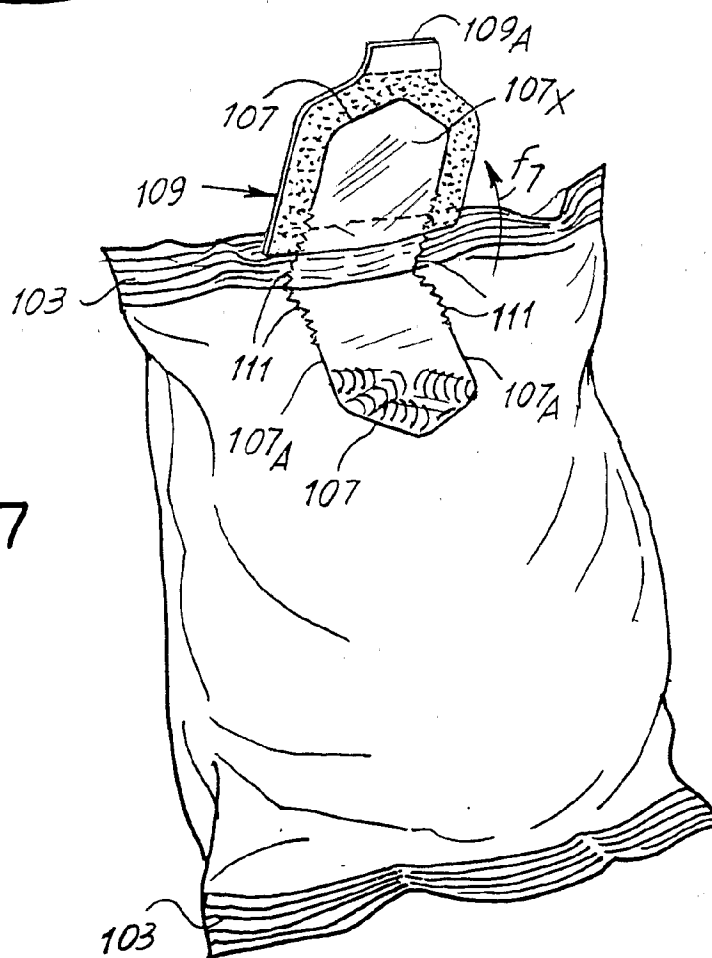
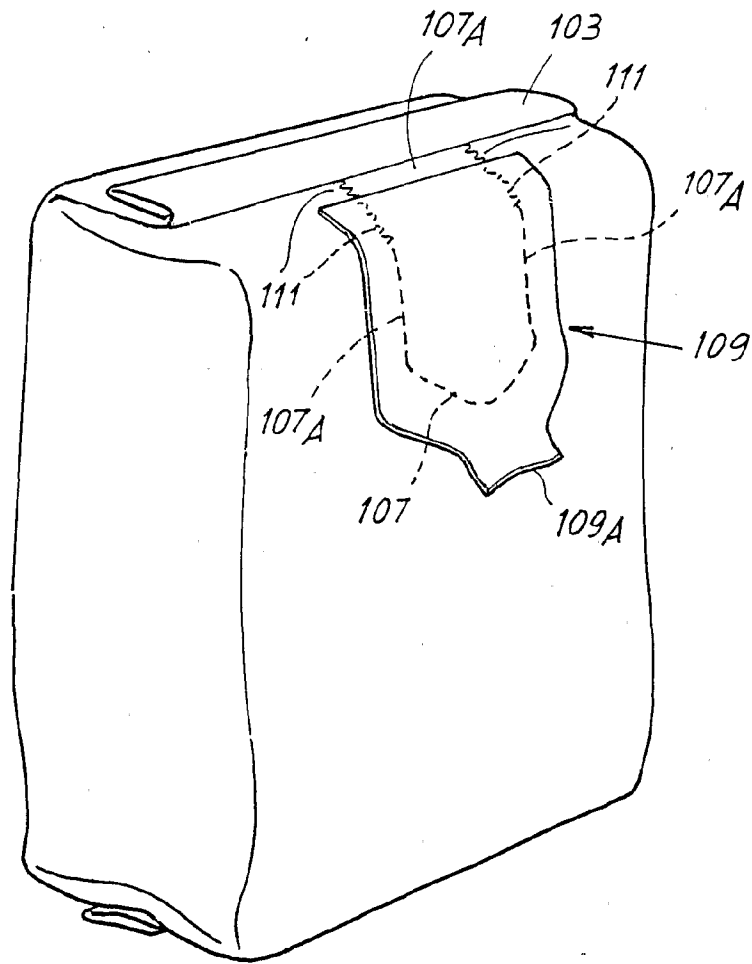


Fig. 7

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Fig.8



## INTERNATIONAL SEARCH REPORT

Inter al Application No

PCT/IT 01/00308

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B65D75/58 B65D85/22

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B65D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 89 07 826 U (NÖLKEN GMBH) 23 November 1989 (1989-11-23) page 2; figure 1 ----	1-5
A	EP 0 060 411 A (TETRA PAK DEV ;TETRA PAK RAUSING & CO KG (DE)) 22 September 1982 (1982-09-22) figure 2 ----	2
A	US 5 292 061 A (CASTAGNONI DANIELLE Y) 8 March 1994 (1994-03-08) column 1, line 15 - line 18; figure 2 ----	4
A	US 5 161 350 A (NAKAMURA KENJI) 10 November 1992 (1992-11-10) figures 1,2 ----- -/--	5



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

\* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

10 October 2001

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## INTERNATIONAL SEARCH REPORT

Inter al Application No

PCT/IT 01/00308

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
E	EP 1 123 874 A (PANZANI SA) 16 August 2001 (2001-08-16) column 3, line 53 -column 5, line 27; figures 1,2 -----	1-4

**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

Continuation of Box I.2

Claims Nos.: 6

Claim 6 was not searched, because it violates PCT Rule 6.2.(a).

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IT 01/00308

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